

REMARKS

[1-11] Claims 1, 2, 3, 6, 9, 12, 13, and 15-18 were rejected under § 102 as being anticipated by Baba '077. This rejection is respectfully traversed.

As is explained in the Applicant's specification at the top of page 7, the exemplary wirings 18 (Fig. 1) are confined to the wiring region 28 (Fig. 2), and they and the chip region 30 are surrounded by the exemplary reinforcement layer region 32 (Fig. 2), with its reinforcement layer 20 (Fig. 1).

As the Examiner notes (line 5 of ¶ 3 on page 2), Baba does not illustrate the claimed wiring region, but the Examiner asserts that wiring is under the chip 1 in Fig. 5B. The Applicant agrees that wiring must be there; the internal wiring appears to extend internally throughout the substrate, because Baba states that the wiring connects the electrodes 7 and 12 (col. 1, lines 58-60) and the electrodes 12 extend to the outer edge of the substrate. However, the wiring is *inside* the board 4 (except for the chip region of the top surface) and not on the surface. There is no surface wiring region.

In contrast, the Applicant claims non-overlapping reinforcement and wiring regions and layers on the surface of the insulating substrate. Instant Fig. 2, for example, shows that the wiring regions 28 the reinforcement region 16 do not overlap each other. Reinforcement layers 20 are not provided on top of the wirings, as in Baba.

The advantage of the Applicant's claimed feature is that the reinforcement layers can be formed at the same time as the wirings. Therefore, reinforcement layers can be introduced into the structure without an additional manufacturing step (e.g., without any additional lithography).

A further advantage is that the surface of the solder resist 22 (the protective film) is substantially flat over the chip region, since both of the wiring region and the reinforcement region do not overlap with the chip region. This prevents a so-called “void” from being

generated in the solder resist (protective film). Thus, the reliability of the structure can be improved.

The disjoint wiring and reinforcement regions are recited in all of the independent claims 1, 6, and 9. Withdrawal of the rejection is requested.

[12-14] Claims 4, 7, and 10 were rejected under §103 over Baba in view of Lin. This rejection is respectfully traversed on the grounds set out above.

[15-16] Claims 5 and 8 were rejected under §103 over Baba in view of Norville. This rejection is respectfully traversed on the grounds set out above.


[17] Claim 11 was rejected under §103 over Baba in view of admitted prior art. This rejection is respectfully traversed on the grounds set out above.

[18-20] Claims 14 and 19 were rejected under §103 over Baba in view of Niwa. This rejection is respectfully traversed on the grounds set out above.

Withdrawal of the rejections is requested.

Respectfully submitted,

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